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14. A voltage ramp generator according to Claim 9,
wherein current generated by said current generator is based
upon the equation:

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$$Ig2 = K2 \times \frac{Vg2}{Rg2}$$

where Ig2 is the current, K2 is a proportionality coefficient, Rg2 is the first resistance, and Vg2 is a reference voltage proportional to the quantity $k \frac{T}{q}$, where k is the Boltzmann constant, T is absolute temperature, and q is the charge of an electron.

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15. A voltage ramp generator comprising:
a capacitance; and
a charging circuit connected to said capacitance and comprising

a current generator, and
a degenerate current mirror circuit connected to said current generator and to said capacitance for generating a capacitance charging current.

16. A voltage ramp generator according to Claim 15,
wherein said current generator has a first resistance, and
said degenerate current mirror circuit has a second resistance such that the capacitance charging current is proportional to a square of a ratio of the second resistance and the first resistance.

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17. A voltage ramp generator according to Claim 15, wherein said degenerate current mirror circuit comprises:

a first MOS transistor having a channel of a first conductivity type comprising a gate, a drain and a source, the drain and the gate being connected to said current generator, and the source being connected to said second resistance; and

a second MOS transistor having a channel of the first conductivity type comprising a gate, a drain and a source, the gate being connected to the gate of said first MOS transistor, the source being connected to a supply voltage, and the drain being connected to said capacitance.

18. A voltage ramp generator according to Claim 17, wherein each of said first and second MOS transistors comprises a P-channel MOS transistor

19. A voltage ramp generator according to Claim 15, wherein said capacitance comprises a gate capacitance of a MOS transistor.

20. A voltage ramp generator according to Claim 15, wherein current generated by said current generator is based upon the equation:

$$Ig2 = K2 \times \frac{Vg2}{Rg2}$$

where Ig2 is the current, K2 is a proportionality coefficient, Rg2 is the first resistance, and Vg2 is a

reference voltage proportional to the quantity $k\frac{T}{q}$, where k is

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the Boltzmann constant, T is absolute temperature, and q is
the charge of an electron.

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21. A current ramp generator comprising:
a voltage ramp generator comprising
a capacitance, and
a charging circuit connected to said
capacitance and comprising
a current generator having a first
resistance, and
a circuit connected to said current
generator and to said capacitance comprising a
second resistance and enabling a capacitance
charging current to be proportional to a square
of a ratio of the second resistance and the
first resistance; and
a conversion circuit connected to said voltage ramp
generator for generating a current ramp.

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22. A current ramp generator according to Claim 21,
wherein said conversion circuit comprises a third resistance.

23. A current ramp generator according to Claim 21,
wherein said third resistance comprises an implanted
resistance having a positive temperature coefficient.

24. A current ramp generator according to Claim 21,
wherein said charging circuit comprises a degenerate current
mirror circuit.

25. A current ramp generator according to Claim 24,
wherein said degenerate current mirror circuit comprises:

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a first MOS transistor having a channel of a first conductivity type comprising a gate, a drain and a source, the drain and the gate being connected to said current generator, and the source being connected to said second resistance; and

a second MOS transistor having a channel of the first conductivity type comprising a gate, a drain and a source, the gate being connected to the gate of said first MOS transistor, the source being connected to a supply voltage, and the drain being connected to said capacitance.

26. A current ramp generator according to Claim 25, wherein each of said first and second MOS transistors comprises a P-channel MOS transistor.

27. A current ramp generator according to Claim 21, wherein said capacitance comprises a gate capacitance of a MOS transistor.

28. A current ramp generator according to Claim 21, wherein current generated by said current generator is based upon the equation:

$$Ig2 = K2 \times \frac{Vg2}{Rg2}$$

where Ig2 is the current, K2 is a proportionality coefficient, Rg2 is the first resistance, and Vg2 is a

reference voltage proportional to the quantity $k\frac{T}{q}$, where k is the Boltzmann constant, T is absolute temperature, and q is the charge of an electron.

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✓ 29. A current ramp generator comprising:
a voltage ramp generator comprising
a capacitance, and
a charging circuit connected to said
capacitance and comprising
a current generator, and
a degenerate current mirror circuit
connected to said current generator and to said
capacitance for generating a capacitance
charging current; and
a third resistance connected to said voltage ramp
generator for generating a current ramp.

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30. A current ramp generator according to Claim 29,
wherein said current generator has a first resistance, and
said degenerate current mirror circuit has a second resistance
such that the capacitance charging current is proportional to
a square of a ratio of the second resistance and the first
resistance.

31. A current ramp generator according to Claim 29,
wherein said third resistance comprises an implanted
resistance having a positive temperature coefficient.

32. A current ramp generator according to Claim 29,
wherein said degenerate current mirror circuit comprises:
a first MOS transistor having a channel of a first
conductivity type comprising a gate, a drain and a source, the
drain and the gate being connected to said current generator,
and the source being connected to said second resistance; and
a second MOS transistor having a channel of the
first conductivity type comprising a gate, a drain and a

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source, the gate being connected to the gate of said first MOS transistor, the source being connected to a supply voltage, and the drain being connected to said capacitance.

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33. A current ramp generator according to Claim 32, wherein each of said first and second MOS transistors comprises a P-channel MOS transistor.

34. A current ramp generator according to Claim 29, wherein said capacitance comprises a gate capacitance of a MOS transistor.

35. A current ramp generator according to Claim 29, wherein current generated by said current generator is based upon the equation:

$$Ig2 = K2 \times \frac{Vg2}{Rg2}$$

where $Ig2$ is the current, $K2$ is a proportionality coefficient, $Rg2$ is the first resistance, and $Vg2$ is a reference voltage proportional to the quantity $k\frac{T}{q}$, where k is the Boltzmann constant, T is absolute temperature, and q is the charge of an electron.

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36. A method for generating a ramp voltage comprising the steps of:

generating a capacitance charging current using a charging circuit comprising a current generator having a first resistance and a circuit connected to the generator comprising

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a second resistance for enabling the capacitance charging current to be proportional to a square of a ratio of the second resistance and the first resistance; and

charging a capacitance with the capacitance charging current for generating the ramp voltage.

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37. A method according to Claim 36, wherein the circuit comprises a degenerate current mirror circuit.

38. A method according to Claim 37, wherein the degenerate current mirror circuit comprises:

a first MOS transistor having a channel of a first conductivity type comprising a gate, a drain and a source, the drain and the gate being connected to said current generator, and the source being connected to said second resistance; and

a second MOS transistor having a channel of the first conductivity type comprising a gate, a drain and a source, the gate being connected to the gate of said first MOS transistor, the source being connected to a supply voltage, and the drain being connected to said capacitance.

39. A method according to Claim 36, wherein the capacitance comprises a gate capacitance of a MOS transistor.

40. A method according to Claim 36, wherein current generated by the current generator is based upon the equation:

$$Ig2 = K2 \times \frac{Vg2}{Rg2}$$

where Ig2 is the current, K2 is a proportionality coefficient, Rg2 is the first resistance, and Vg2 is a